

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Byeong-chan Lee et al.

Confirmation No.: 6744

Serial No.: 10/722,193

Filed: November 26, 2003

For: INTEGRATED CIRCUIT DEVICES HAVING BURIED INSULATION LAYERS  
AND METHODS OF FORMING THE SAME

November 5, 2004

Mail Stop Petitions  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION TO GRANT A FILING DATE FOR A COMPLETE NON-PROVISIONAL  
APPLICATION**

Sir:

In response to the Notice of Incomplete Non-Provisional Application, Applicant hereby petitions to assign the filing date of November 25, 2003, for the above-identified patent application as this was the date the Application (including the 20 formal drawing sheets) was deposited as "Express Mail" in the U.S. Postal Service (USPS). The following is enclosed as evidence of November 25, 2003 being the filing date for the application which was properly filed under 37 C.F.R. § 1.10:

1. A true and accurate copy of the Cover Sheet for the Application showing that 20 formal drawing sheets were included and the Express Mail signature and date on Page 2;
2. A true and accurate copy of a printout from [www.usps.com](http://www.usps.com) with a tracking status that the package was **delivered** on November 26, 2004;
3. A true and accurate copy of 20 formal Drawing sheets included with the Application; and
4. A true and accurate copy of our return post card indicating that the Application was received by the USPTO and included 20 formal drawing sheets with the application.

This petition is being filed promptly after Applicant became aware that no filing date has been granted as indicated in the Notice of Incomplete Non-Provisional Application. Applicant respectfully requests the granting of November 25, 2003 as the filing date in view of that the Application was mailed with all required parts including the Drawings. Although the USPS did not complete the "date in" box on the Express Mail receipt (through no fault of Applicant), the tracking status print out evidences that the complete Application was mailed via Express Mail on November 25, 2003, as the USPTO received the same on November 26,

2003 (*i.e.*, one day after Applicant mailed the Application). Accordingly, Applicant respectfully requests the granting of November 25, 2003 as the filing date.

The Commissioner is authorized to charge the required fee of \$130 to Deposit Account No. 50-0220 for consideration of the present petition. However, Applicant concurrently hereby petitions for a refund of the petition fee (\$130) on the basis that Applicant properly followed the requirements of 37 CFR § 1.10 and the USPTO failed to accord the proper filing date under MPEP § 505. Thus the need to file this petition is due to error on the part of the USPTO. The Commissioner is authorized to charge any deficiency, credit any overpayments or refunds to Deposit Account No. 50-0220.

Respectfully submitted,

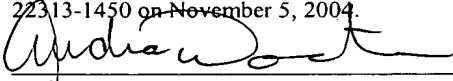


Robert N. Crouse  
Registration No. 44,635

Attorney For Applicant  
**USPTO Customer No. 20792**  
Myers Bigel Sibley & Sajovec  
Post Office Box 37428  
Raleigh, North Carolina 27627  
Telephone: 919/854-1400  
Facsimile: 919/854-1401

**Certificate of Mailing under 37 CFR 1.8 (or 1.10)**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: MS Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 5, 2004.



Audra Wooten



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO.: 5649-1225

DATE: November 25, 2003

**UTILITY PATENT APPLICATION TRANSMITTAL LETTER  
AND FEE TRANSMITTAL FORM (37 CFR § 1.53(b))**

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing under 37 CFR § 1.53(b) is:

- ☒ a patent application  
☐ a Continuation    ☐ a Divisional    ☐ a Continuation-in-Part (CIP)    Application of prior application no.: \_\_\_\_\_; filed \_\_\_\_\_, the disclosure of which is incorporated herein by reference in its entirety.  
☐ and claims the benefit of Provisional Application No. \_\_\_\_\_; filed \_\_\_\_\_.

Inventor(s) or Application Identifier:

**Byeong-chan Lee**  
**Yong-hoon Son**

**Si-young Choi**  
**In-soo Jung**

**Jong-ryeol Yoo**  
**Deok-hyung Lee**

Entitled:    **FERROELECTRIC MEMORY DEVICES INCLUDING PROTECTION ADHESION LAYERS AND METHODS OF FORMING THE SAME**

Myers Bigel Sibley & Sajovec, P.A.  
P. O. Box 37428  
Raleigh, North Carolina 27627  
Telephone: (919) 854-1400  
Facsimile: (919) 854-1401  
Customer No. 20792

Enclosed are:

1. ☒ Application Transmittal Letter and Fee Transmittal Form (*A duplicate is enclosed for fee processing*)
2. ☒ 24 pages of Specification (including 26 claims)
3. ☒ 20 sheets of Formal Drawings (35 USC 113)
4. ☒ Oath or Declaration
  - a. ☒ newly executed (*original or copy*)
  - b. ☐ copy from prior application (37 CFR 1.63(d) (*for continuation/divisional*) [Note Box 6 Below])
  - c. ☐ **DELETION OF INVENTOR(S)** (*Signed statement deleting inventor(s) named in the prior application*)
5. ☐ Application Data Sheet. See 37 CFR 1.76
6. ☐ Incorporation By Reference (*useable if box 4b is checked*)

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

7. ☐ Microfiche Computer Program (*Appendix*)
8. ☒ Assignment papers (*cover sheet(s) and document(s)*)
9. ☐ Applicant claims small entity status. See 37 CFR § 1.27.
10. ☐ Information Disclosure Statement, PTO-1449, and \_\_\_\_\_ references cited
11. ☐ Preliminary Amendment (*Please enter all claim amendments prior to calculating the filing fee.*)
12. ☐ English Translation Document
13. ☐ Certified Copy of \_\_\_\_\_ Application No. \_\_\_\_\_ ; Filed
14. ☐ Sequence Listing/ Sequence Listing Diskette
  - a. ☐ computer readable copy
  - b. ☐ paper copy
  - c. ☐ statement in support
15. ☐ An Associate Power of Attorney
16. ☒ Return Receipt Postcard (MPEP 503) (*Should be specifically itemized*)
17. ☐ Deletion of Inventor(s) (Signed statement attached deleting inventor(s) name in the prior application. See 37 CFR 1.63(d)(2) and 1.33(b).
18. ☐ Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form.
19. ☐ Other:

The fee has been calculated as shown below:

	Column 1 No. Filed	Column 2 No. Extra	Small Entity Rate      Fee	Large Entity Rate      Fee
BASIC FEE			\$385.00	\$ 770.00
TOTAL CLAIMS	26 - 20 =	6	x 09 = \$	x 18 = \$108.00
INDEP CLAIMS	3 - 3 =	0	x 43 = \$	x 86 = \$ - 0 -
<input type="checkbox"/> MULTIPLE Dependent Claims Presented			+ 145 = \$	+ 290 = \$
<i>If the difference in Col. 1 is less than zero, Enter "0" in Col. 2</i>			Total \$	Total \$878.00

- ☐ A check in the amount of \$ \_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ A check in the amount of \$878.00 is enclosed to cover the filing fee and a check in the amount of \$40.00 is enclosed for the Assignment Recordation fee.
- ☐ Please charge my Deposit Account No. 50-0220 in the amount of \$ \_\_\_\_\_
- ☒ The Commissioner is hereby authorized to credit overpayments or charge the following fees associated with this communication to Deposit Account No. 50-0220:
- a. ☒ Additional filing fees under 37 CFR 1.16 for presentation of extra claims.
  - b. ☒ Additional patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

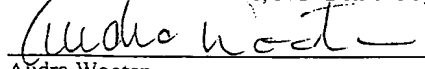
  
Robert N. Crouse  
Registration No. 44,635

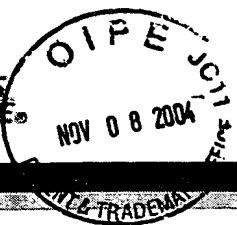
**CERTIFICATE OF EXPRESS MAILING**

Express Mail Label No. EV 318417444 US

Date of Deposit: November 25, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated above and is addressed to: Mail Stop PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Audra Wooten



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Fig. 1

(PRIOR ART)

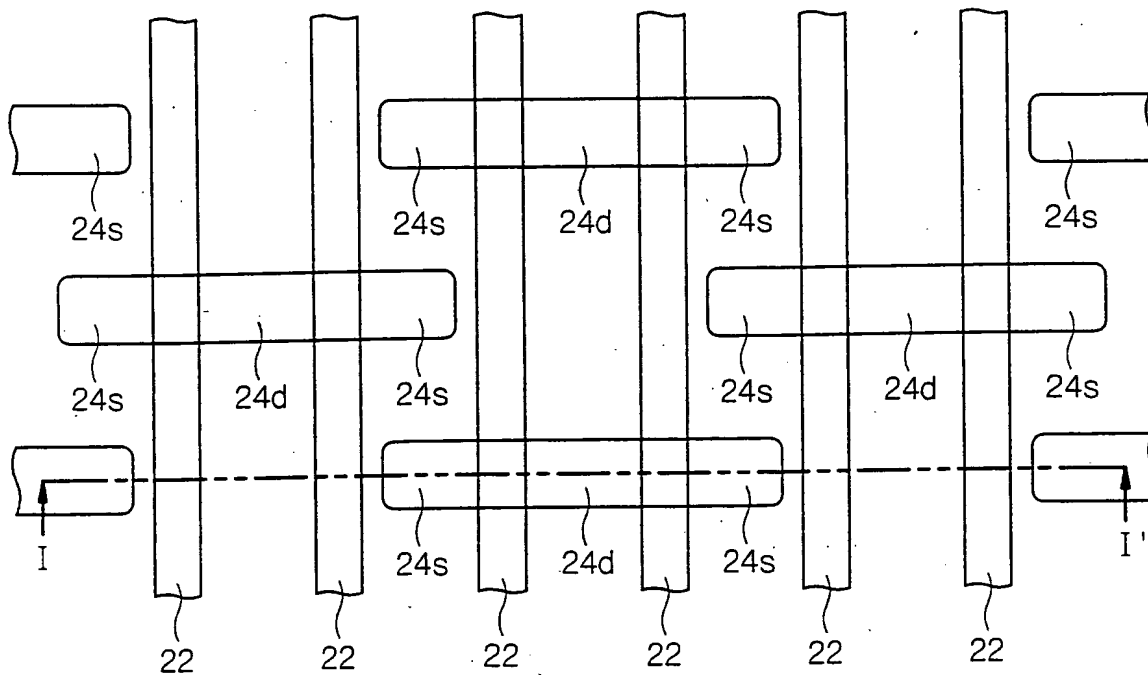


Fig. 2

(PRIOR ART)

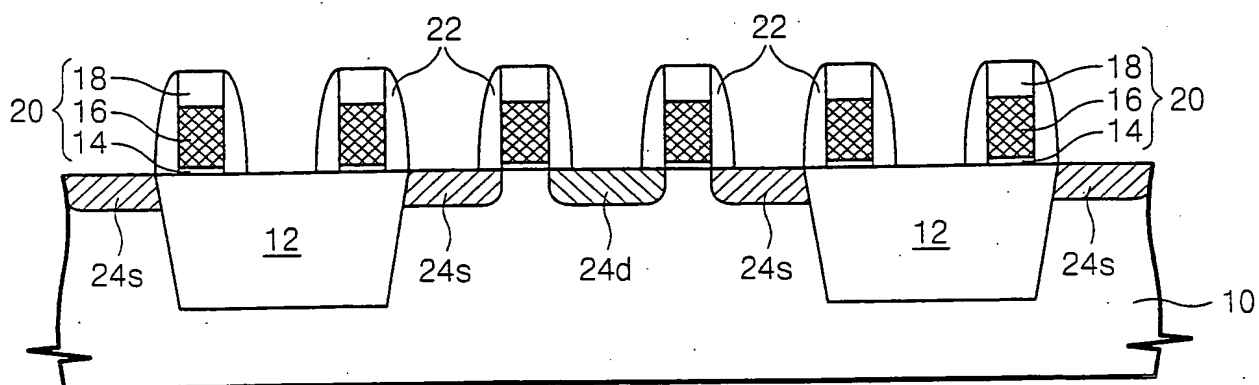


Fig. 3

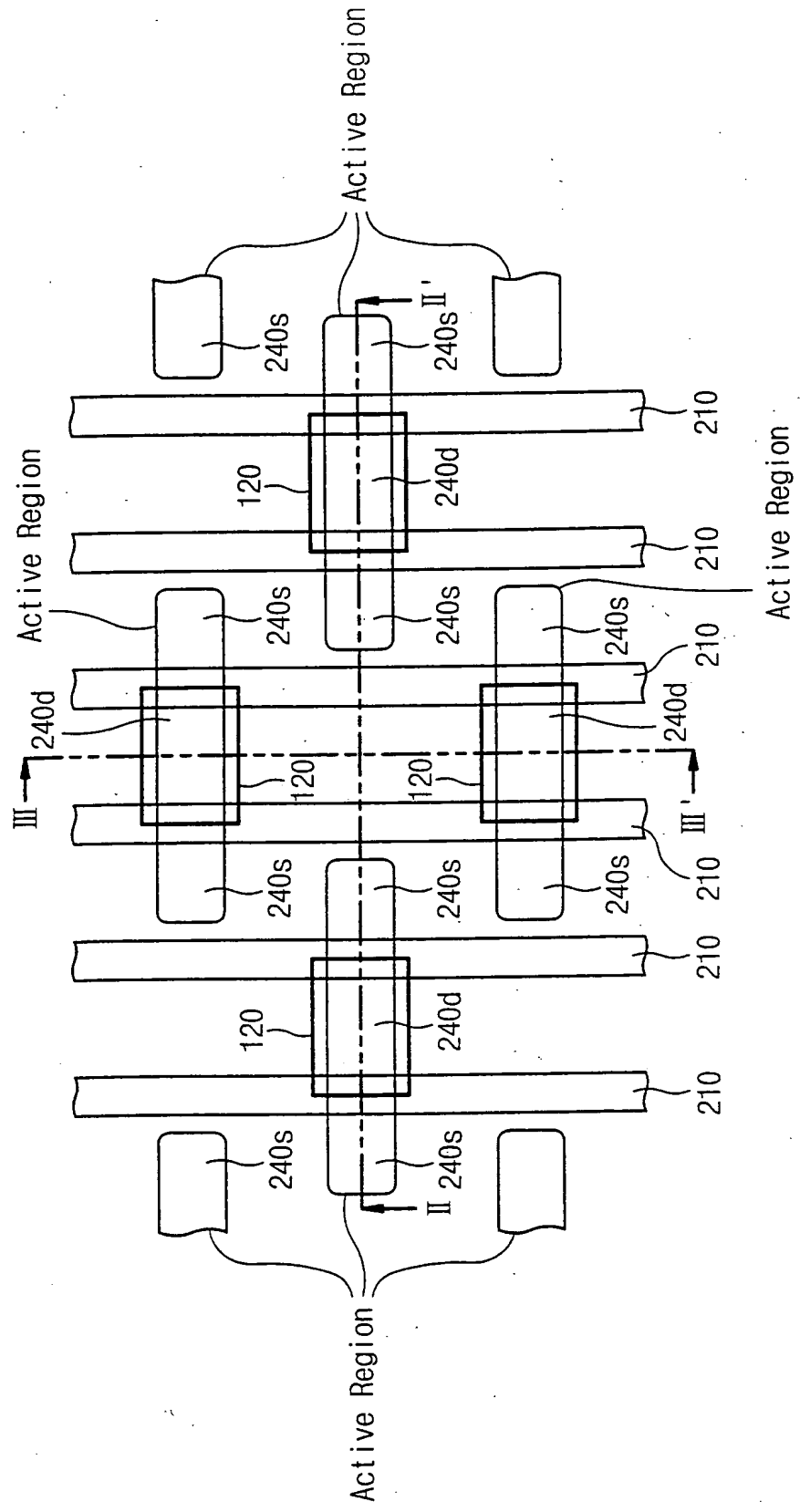


Fig. 4

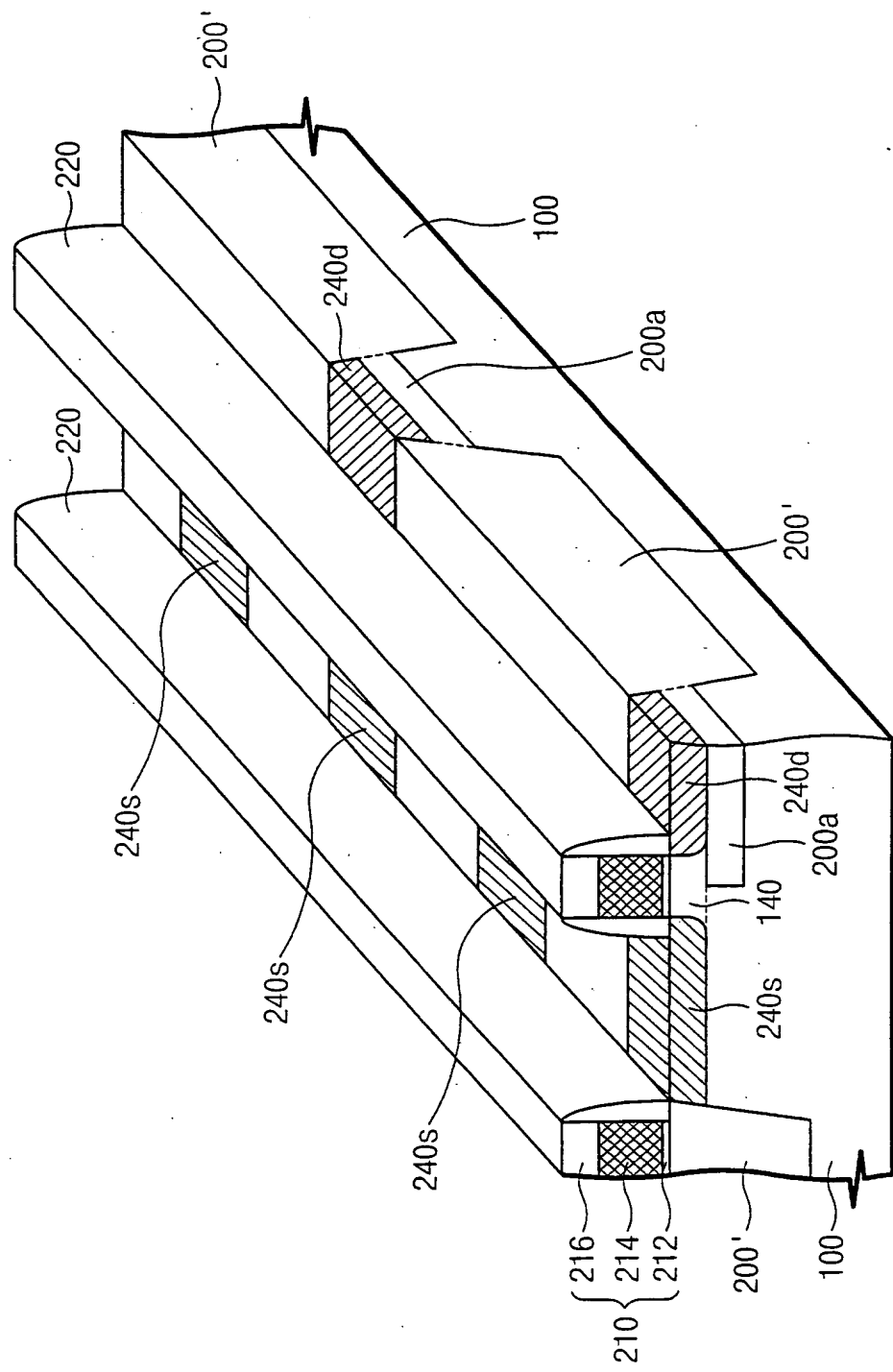




Fig. 5A

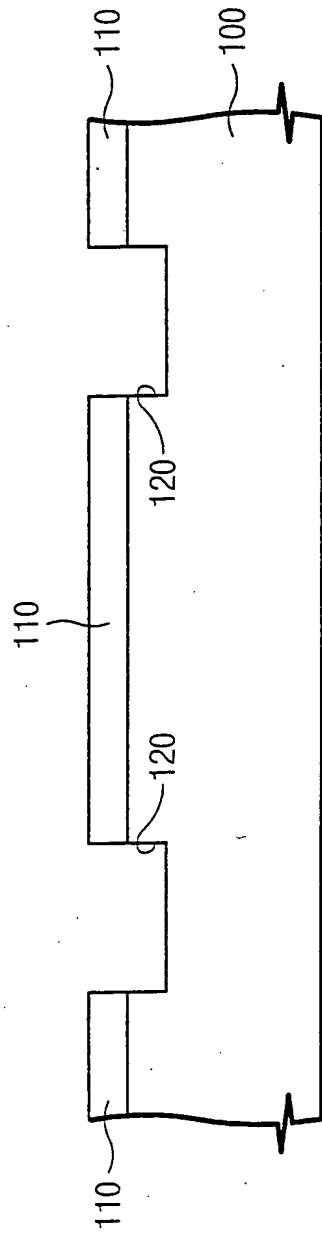


Fig. 5B

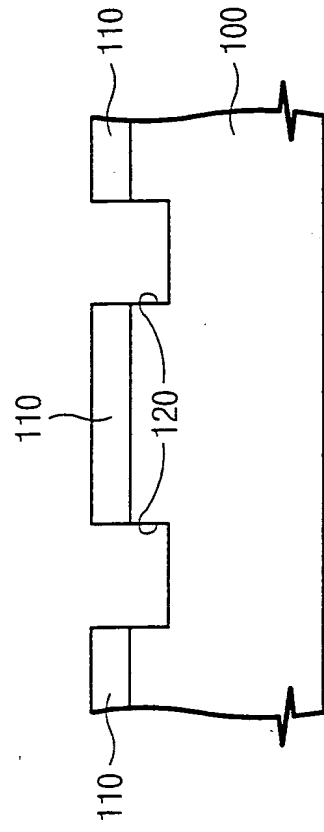


Fig. 6A

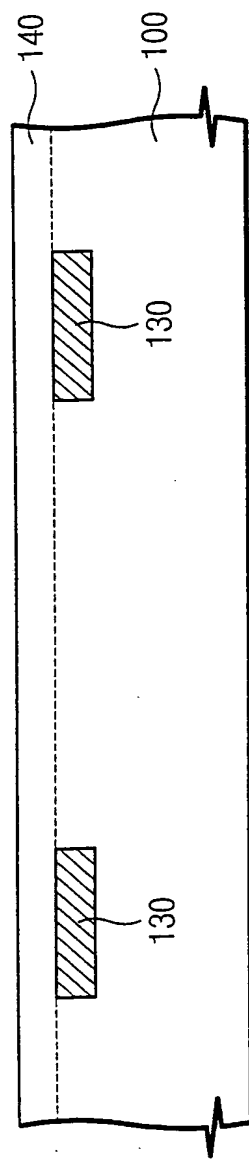


Fig. 6B

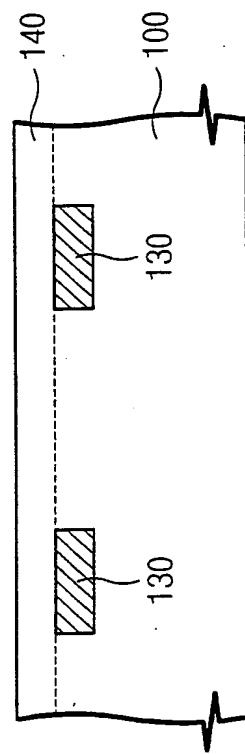


Fig. 7A

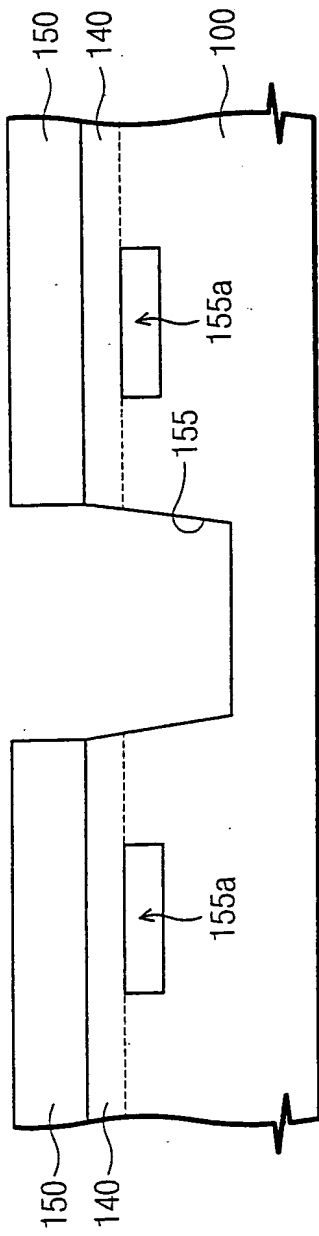


Fig. 7B

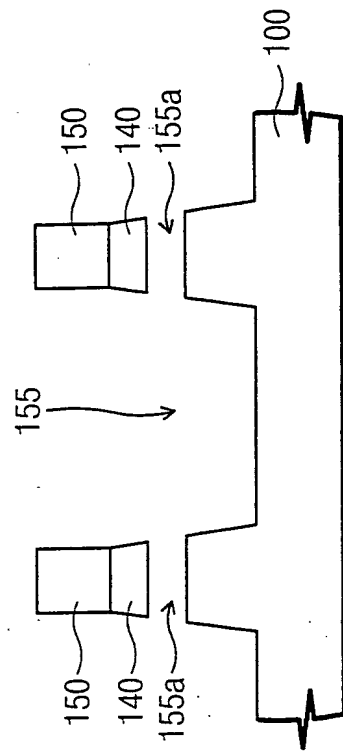


Fig. 8A

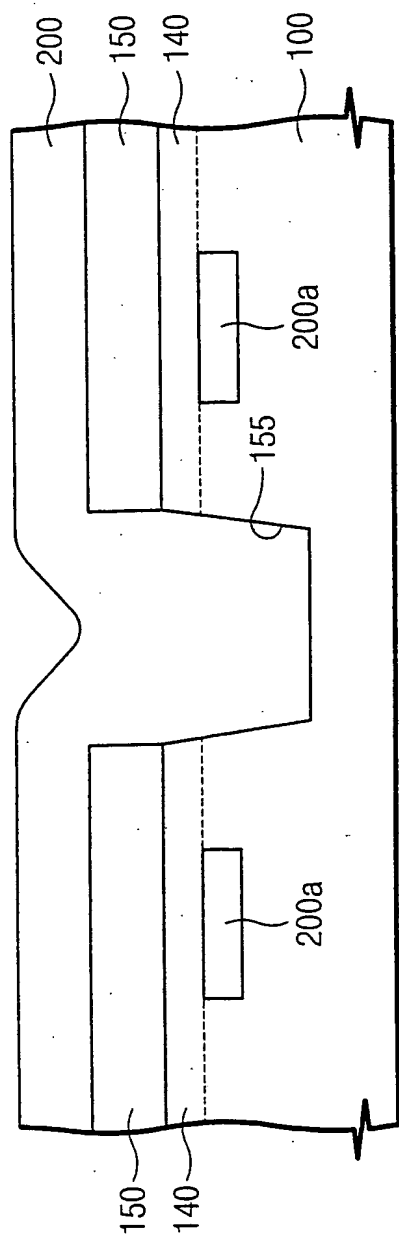


Fig. 8B

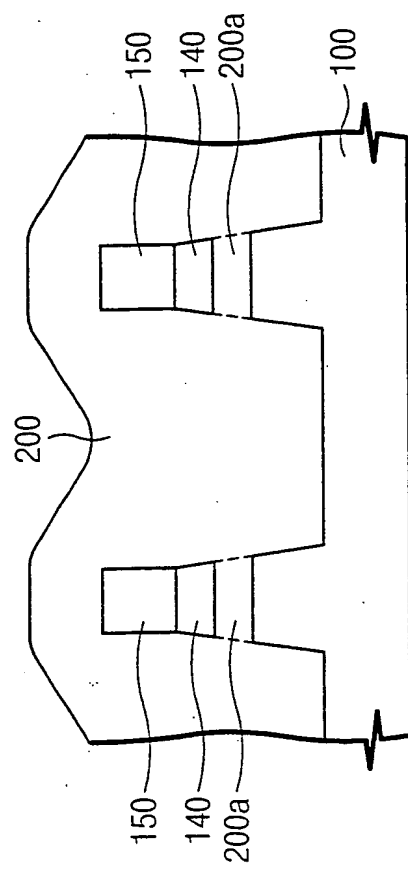


Fig. 9A

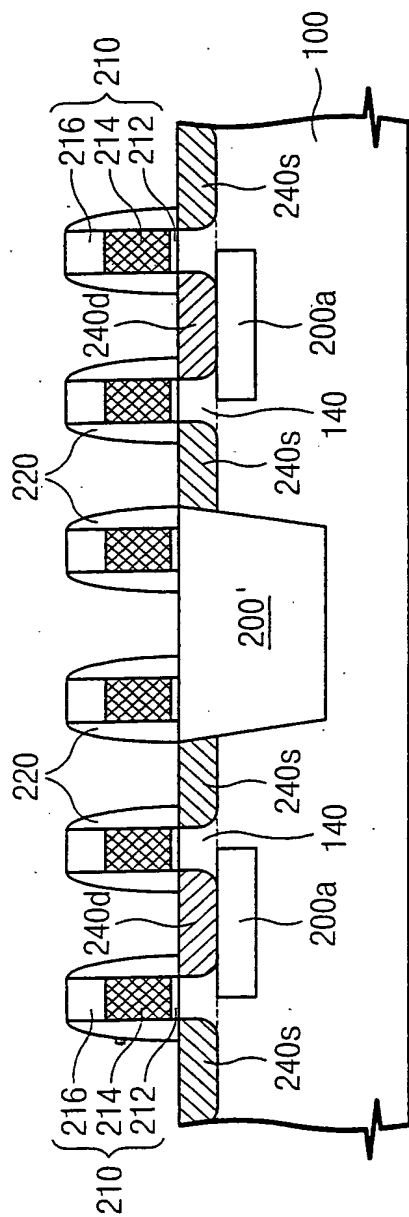


Fig. 9B

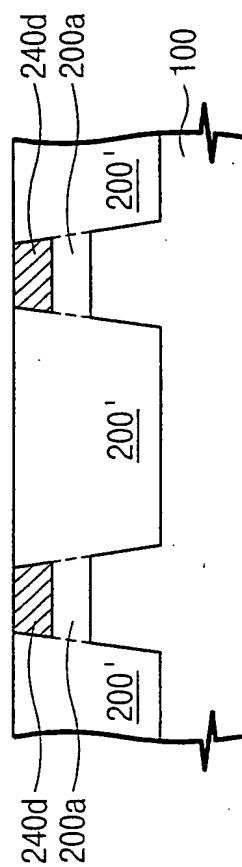




Fig. 11A

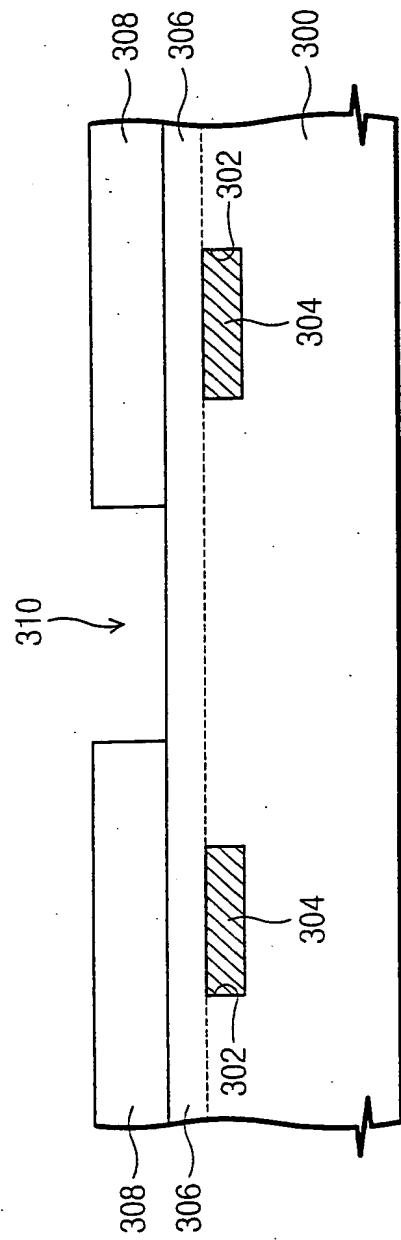


Fig. 11B

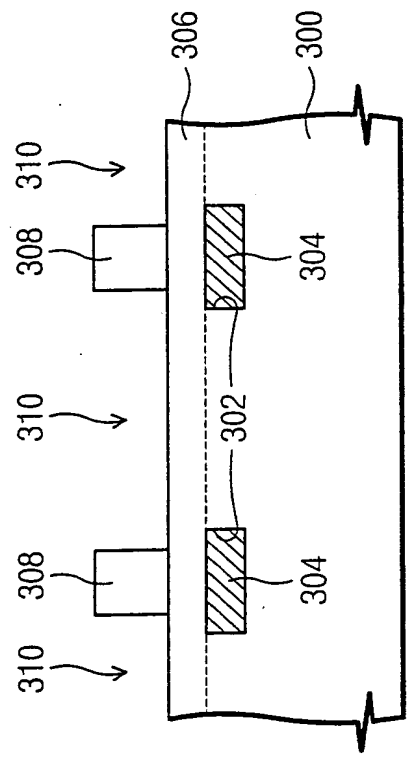


Fig. 12A

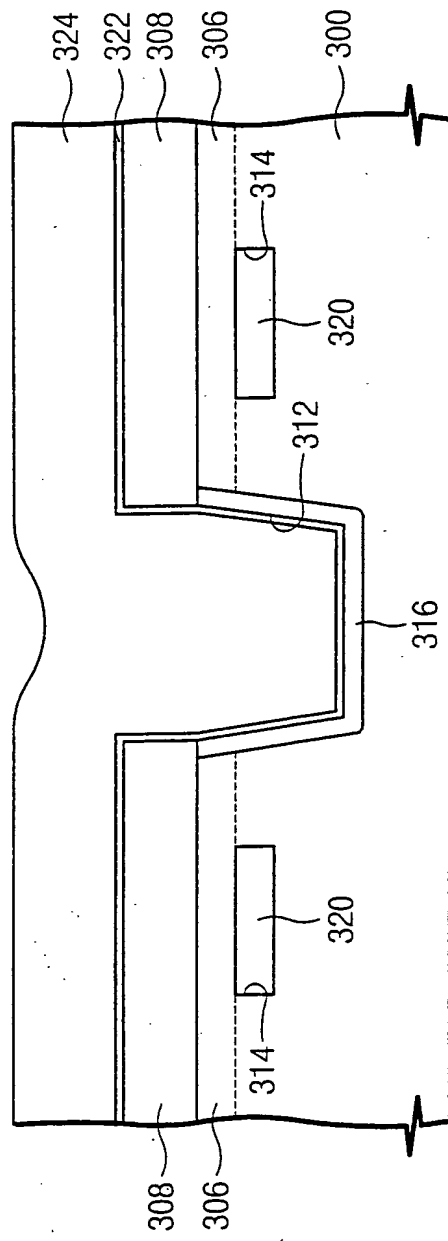


Fig. 12B

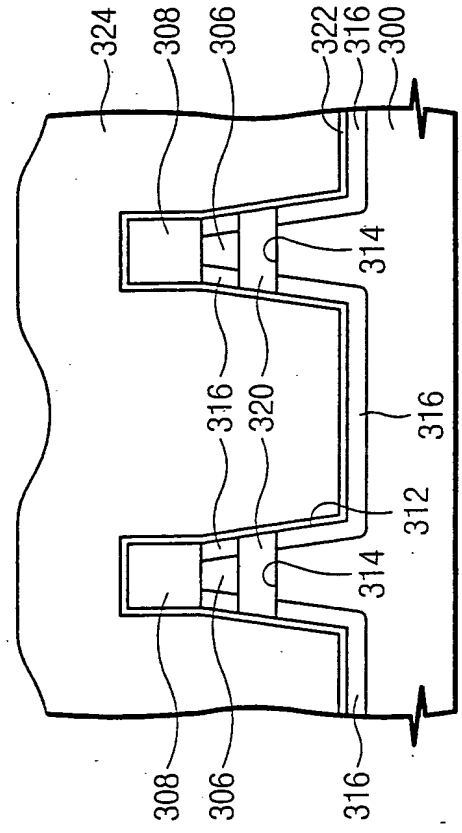




Fig. 12C

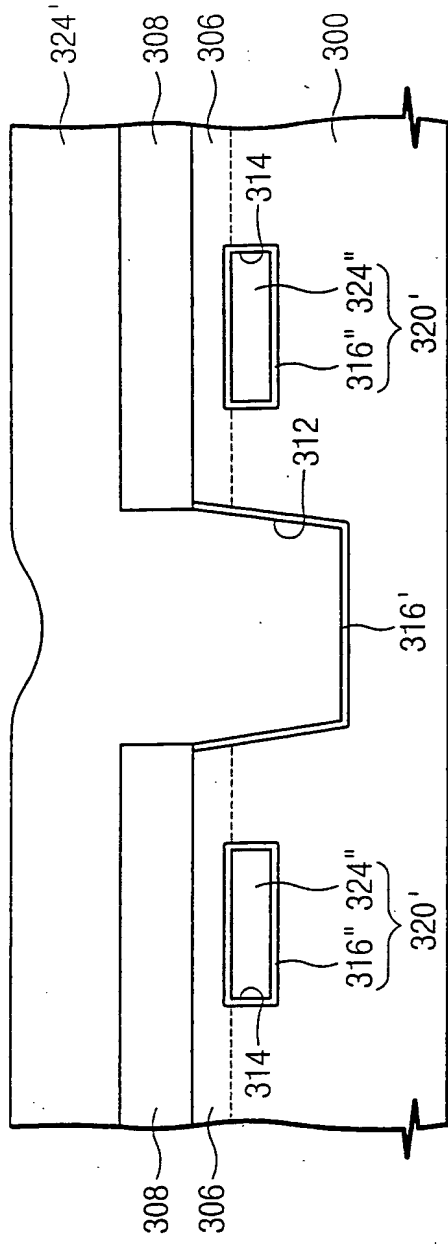


Fig. 12D

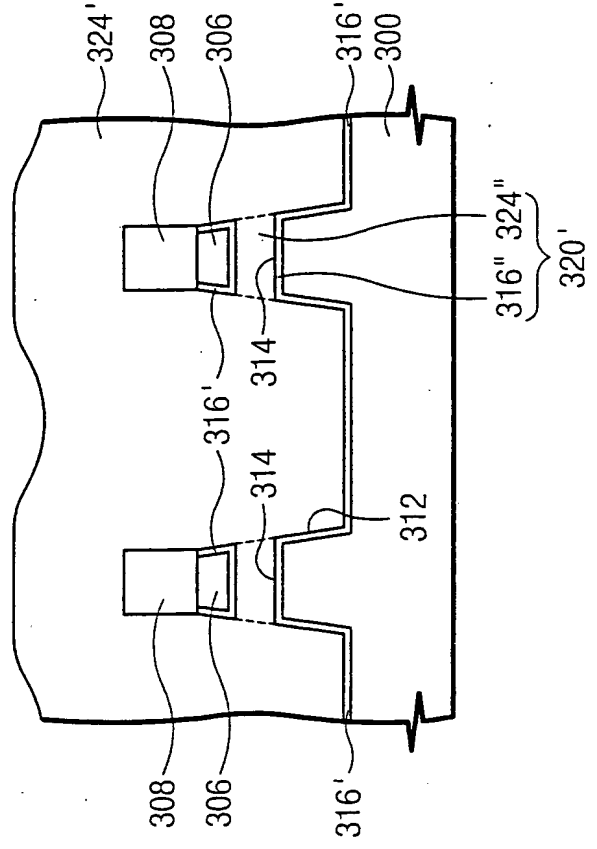


Fig. 13A

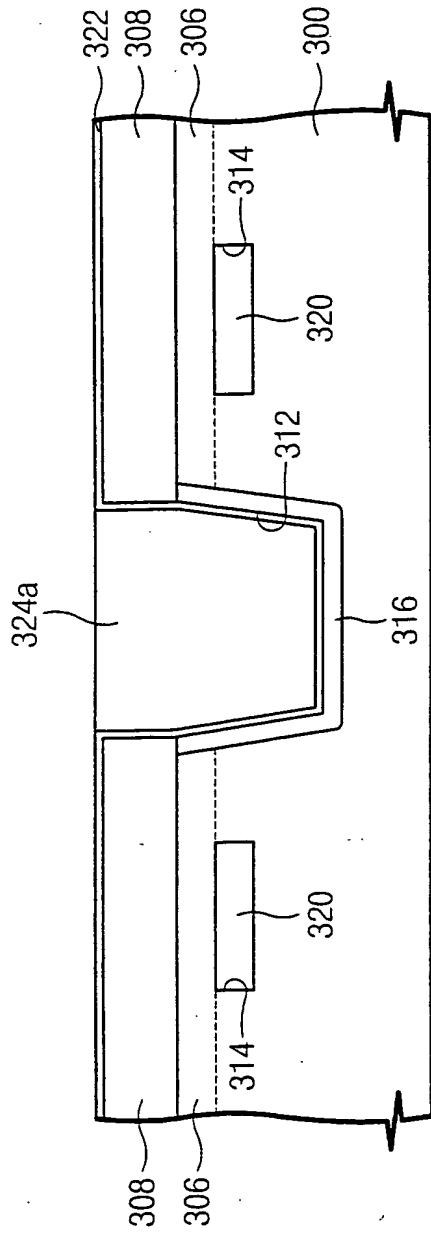


Fig. 13B

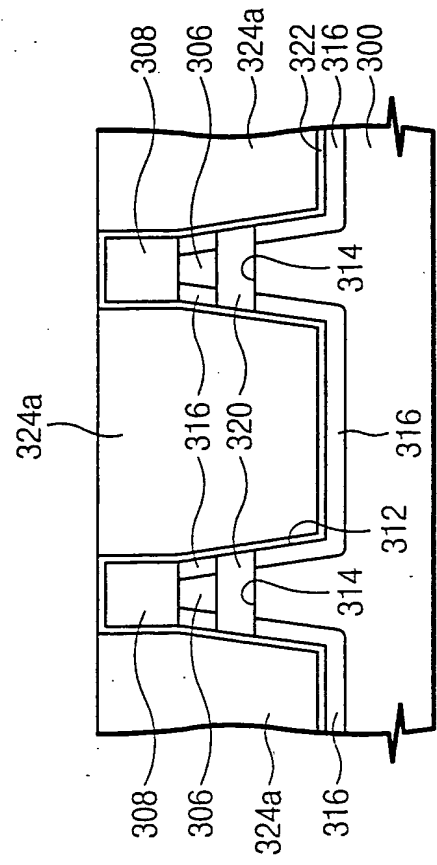


Fig. 14A

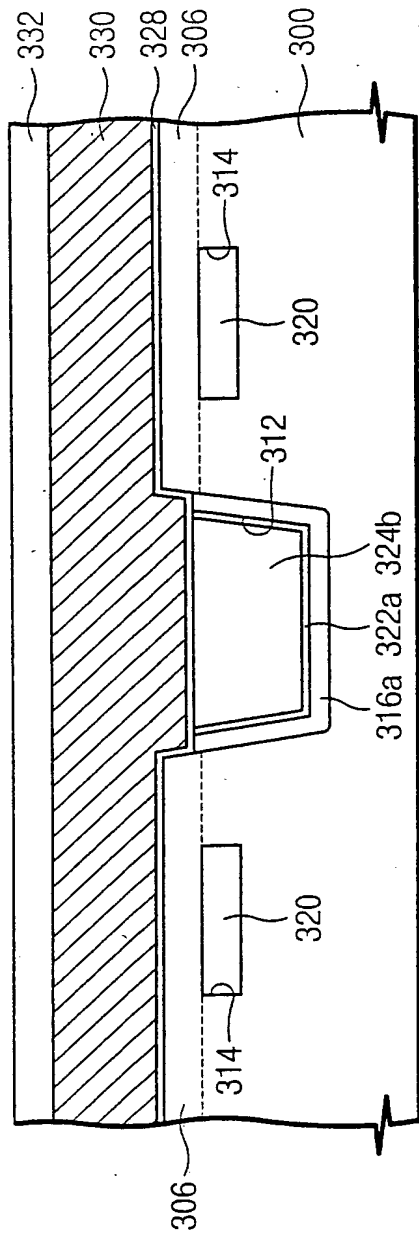


Fig. 14B

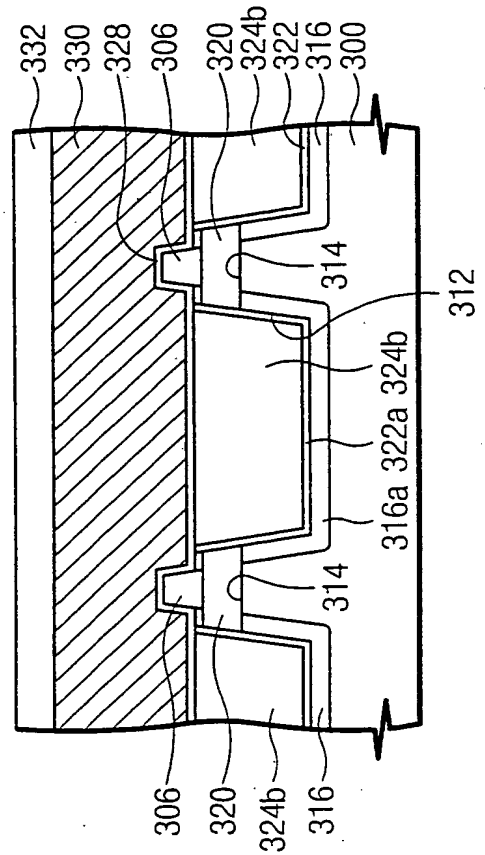


Fig. 15A

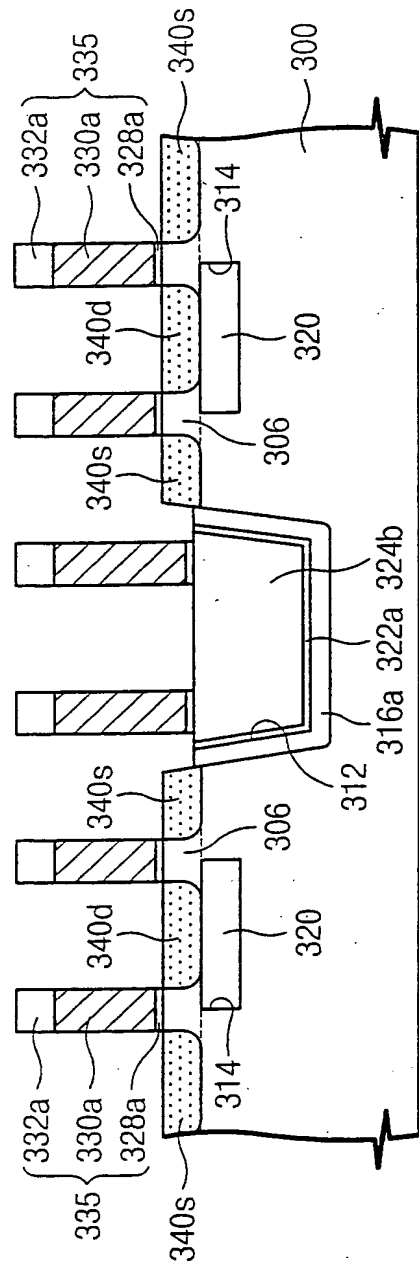


Fig. 15B

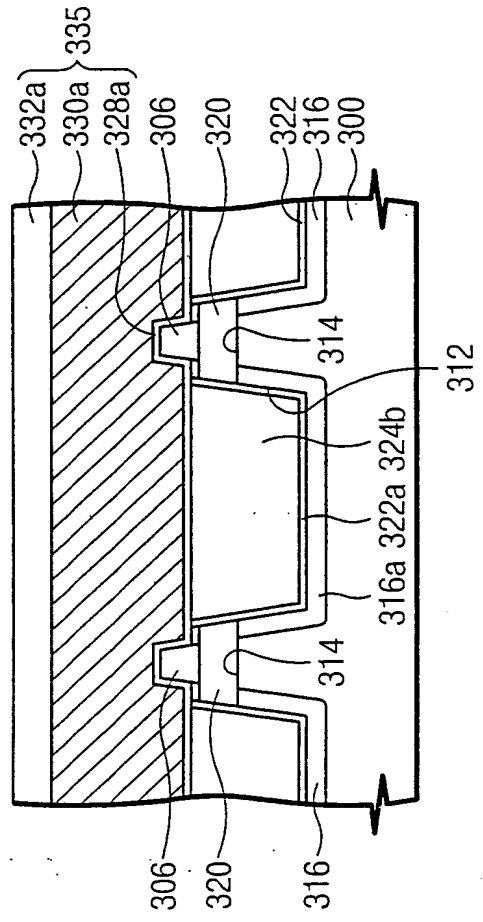




Fig. 17A

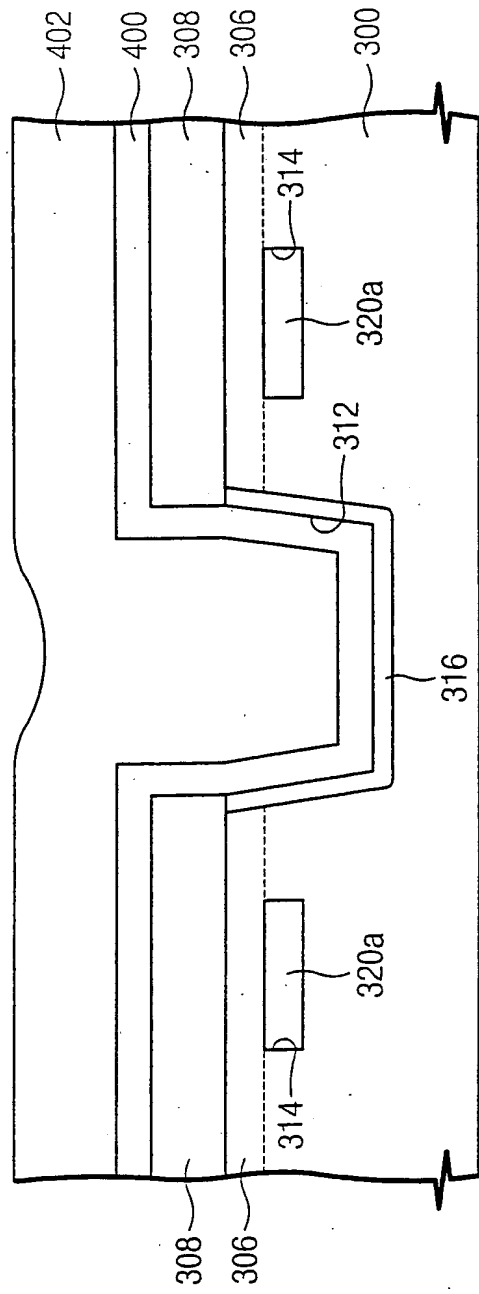


Fig. 17B

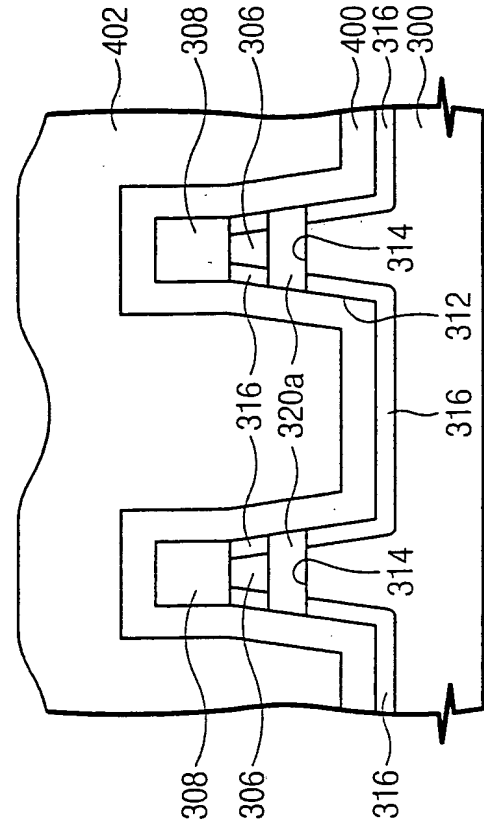


Fig. 18A

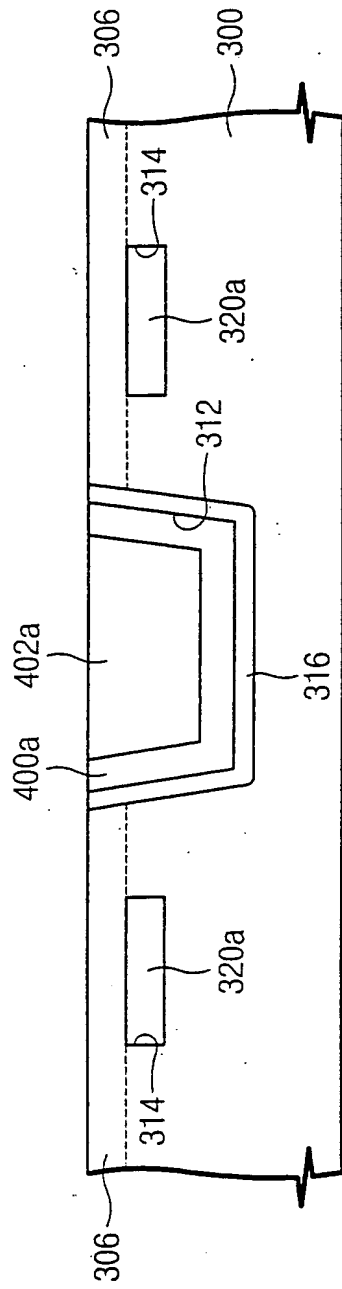


Fig. 18B

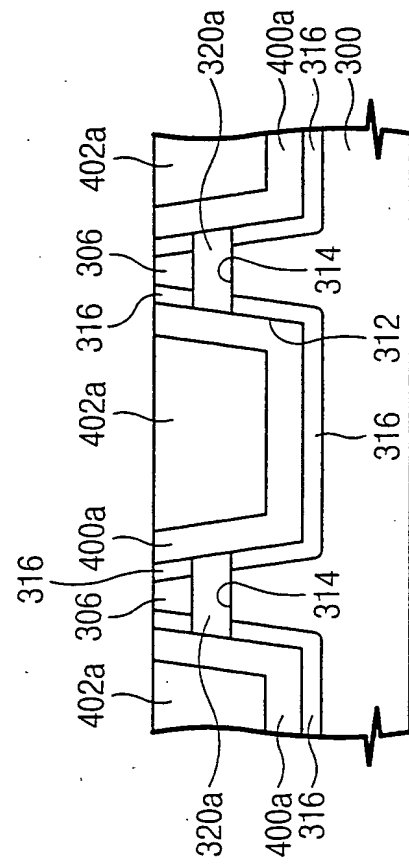


Fig. 19A

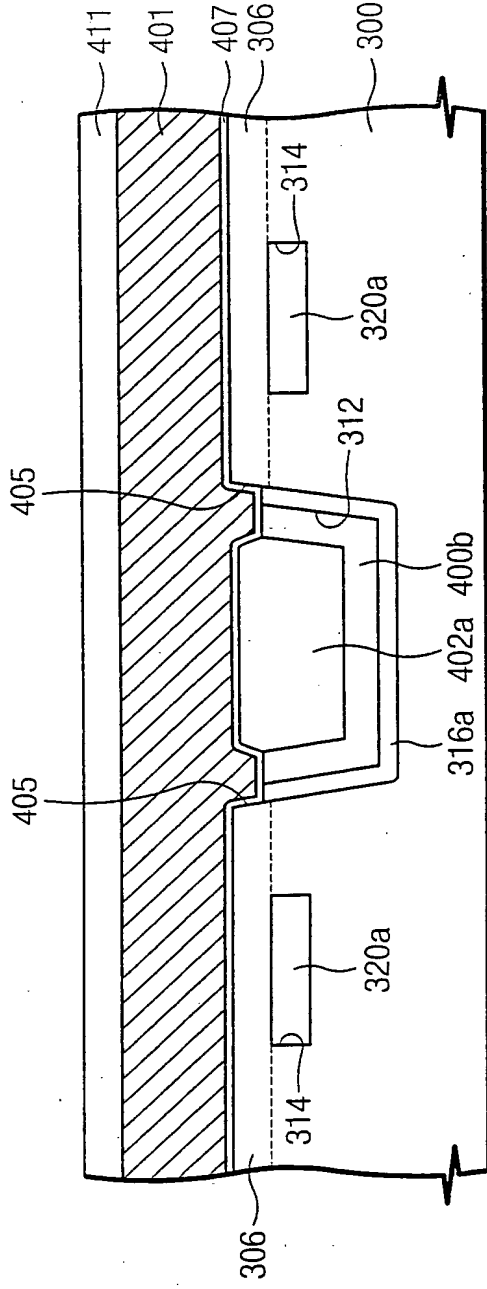


Fig. 19B

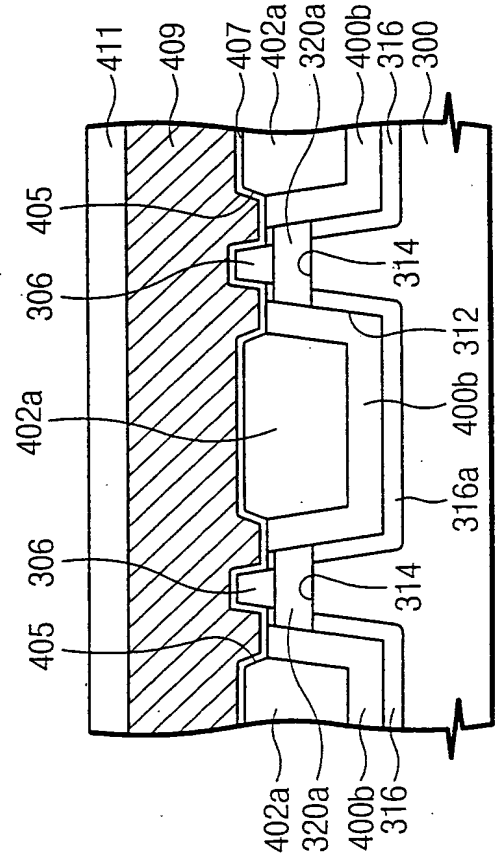




Fig. 20A

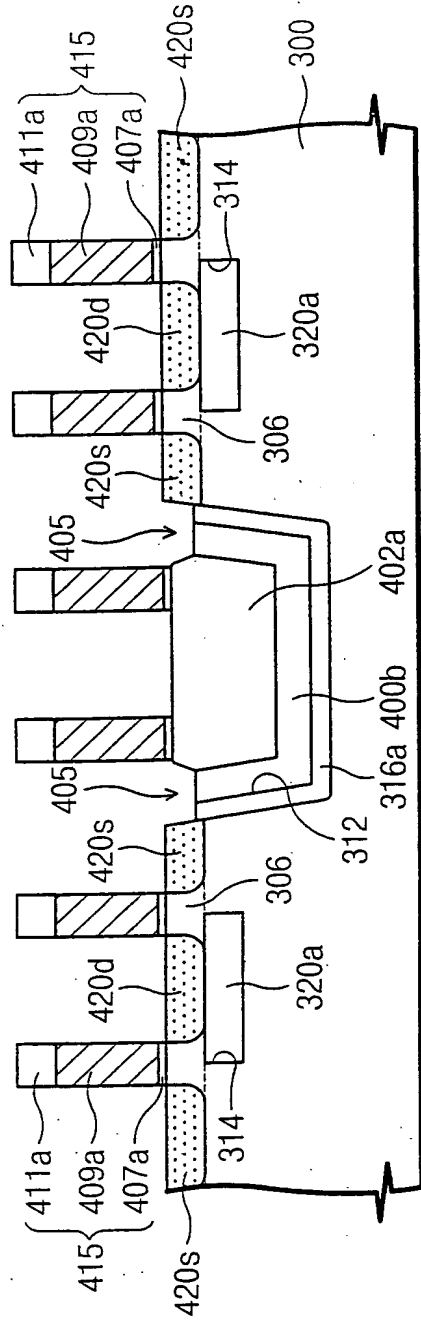
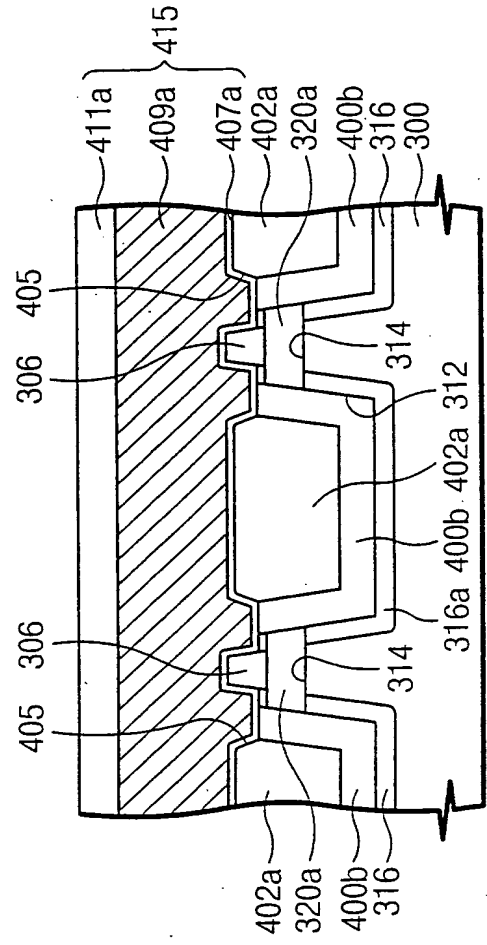


Fig. 20B





Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

BNC/abw

Date: 11-25-03  
Doc. No. 5649-1225  
Serial No. TBA  
Inventor: Lee et al.

Sir: Kindly acknowledge receipt of the accompanying items listed below  
by placing your receiving stamp hereon and return mailing:

✓ Application Transmittal and: ✓ Check \$ 878.00  
✓ Specification pages 24 ✓ IDS & PTO-1449 &      refs.  
✓ No. of Claims 26 ✓ Amendment & Amend. Transmittal  
✓ Declaration & POA ✓ Preliminary Amendment  
✓ Assignment and Fee ✓ Issue Fee  
✓ Small Entity Statement ✓ Brief  
✓ Formal Drawings/ 20 sheets ✓ Appeal  
✓ Associate Power of Attorney ✓ Submittal of Priority Doc.  
✓ Exp. Mail      1st Class Mail

Other:     

17548 U.S. PTO  
10/722193  
112603

Respectfully submitted,  
MYERS BIGEL SIBLEY & SAJOVEC, P.A.  
Attorneys for Applicant

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Delivery Date	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature
Mo. <u>11</u> Day <u>25</u>		
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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/722,193	11/26/2003	Byeong-chan Lee	5649-1225

Robert N. Crouse  
 Myers Bigel Sibley & Sajovec  
 Post Office Box 37428  
 Raleigh, NC 27627



CONFIRMATION NO. 6744

## FORMALITIES LETTER



\*OC000000013769477\*

Date Mailed: 09/09/2004

## NOTICE OF INCOMPLETE NONPROVISIONAL APPLICATION

## FILED UNDER 37 CFR 1.53(b)

A filing date has NOT been accorded to the above-identified application papers for the reason(s) indicated below.

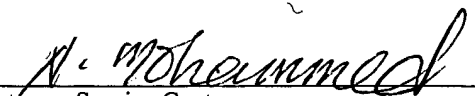
All of the items noted below **and a newly executed oath or declaration covering the items must** be submitted within **TWO MONTHS** of the date of this Notice, unless otherwise indicated, or proceedings on the application will be terminated (37 CFR 1.53(e)). Replies should be mailed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

The filing date will be the date of receipt of all items required below, unless otherwise indicated. Any assertions that the item(s) required below were submitted, or are not necessary for a filing date, must be by way of petition directed to the attention of the Office of Petitions accompanied by the \$130.00 petition fee (37 CFR 1.17(h)). If the petition states that the application is entitled to a filing date, a request for a refund of the petition fee may be included in the petition. Petitions should be mailed to: Mail Stop Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

- The application was deposited without drawings. 35 U.S.C. 113 (first sentence) requires a drawing "where necessary for the understanding of the subject matter sought to be patented." *Applicant should reconsider whether the drawings are necessary under 35 U.S.C. 113 (first sentence).*

Replies should be mailed to: Mail Stop Missing Parts  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*

  
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 Initial Patent Examination Division (703) 308-1202

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